



#3A Amdt.  
M. Brunsm  
PATENT 9/3/02

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: :  
: HWANG et al. : Group Art Unit: 2814  
: :  
Serial No.: 10/022,349 : Examiner: D. Wille  
: :  
Filed: December 20, 2001 :  
: :  
For: A SINGLE-CHIP STRUCTURE OF SILICON GERMANIUM  
PHOTODETECTOR AND HIGH-SPEED TRANSISTOR

RECEIVED  
AUG 28 2002  
TECHNOLOGY CENTER 2800

**AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

This is in response to the Official Action of May 28, 2002, in connection with the above-identified application.

Please amend the above-identified application as follows.

**IN THE CLAIMS:**

Please cancel claims 1-19 without prejudice or disclaimer and add the following new claims to the application.

Sub  
B1  
AT Cont

20(New). A single-chip structure of silicon germanium photodetectors and high-speed transistors comprising:  
a substrate;  
a phototransistor, which is formed on a side of the substrate;  
a high-speed bipolar transistor which is located on the opposite side of the phototransistor on substrate; and  
a separated insulation-layer which separates the phototransistor and the high-speed bipolar transistor, consisting of the above components, a single-chip structure